

DOCUMENT RESUME

ED 249 435

CS 017 754

AUTHOR Kerr, Douglas M.
TITLE Changing Schools to Prevent Delinquency.
PUB DATE Aug 84
NOTE 47p.; Paper presented at the Annual Convention of the American Psychological Association (92nd, Toronto, Ontario, Canada, August 24-28, 1984).
AVAILABLE FROM University of Washington, Center for Law and Justice, JD-45, Seattle, WA 98195 (\$4.50).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Attitude Change; *Change Strategies; *Delinquency Prevention; *Educational Change; Elementary Secondary Education; Program Attitudes; Public Schools; School Activities; *School Role; Social Psychology
IDENTIFIERS Community Psychology

ABSTRACT

Although community psychologists and prevention specialists view schools as the ideal vehicle for delinquency programs for children, few examples of effective school-based prevention programs are available. Delinquency prevention program developers view common school practices as contributing causes of delinquency, making school change a major target of prevention efforts. This paper discusses the issues in implementing and sustaining organizational change in schools to prevent delinquency. The first step in school change is to analyze the social system of the school by reviewing the school's program and change process, principal leadership and teacher involvement, and program integrity and adaptation. The second step is to analyze program implementation in regard to these basic issues of organizational change. A brief outline is presented of the history and program of the Delinquency Prevention Research and Development Project. Actual problems faced in managing prevention programs are discussed. Anecdotal evidence from experience with prevention efforts in seven cities in the United States is presented for the purpose of clarifying the basic dilemmas of changing schools to prevent delinquency. Conclusions from these attempts to change the social conditions of schools are offered, showing that until the means of effectively implementing prevention programs in schools can be derived, the potential for school-based prevention will remain unrealized. (Author/BL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED249435

Changing Schools to Prevent Delinquency

Douglas M. Kerr

Center for Law and Justice

University of Washington

1984

Prepared for the American Psychological Association

Annual Convention

Toronto, Ontario, Canada

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Douglas M. Kerr

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

CE 017754

ABSTRACT

Community psychologists and prevention specialists agree about the need for effective prevention programs in mental health. Although many view schools as the ideal vehicle for prevention programs for children, few examples of effective school - based prevention programs are available. The difficulties of gaining entry to, and cooperation from, schools probably account for the rarity of successful prevention projects.

Program developers for delinquency prevention programs view common school practices as contributing causes of delinquency, making school change a major target of prevention efforts. In this paper, the issues in implementing and sustaining organizational change in schools to prevent delinquency are discussed. Anecdotal evidence from experience with prevention efforts in seven cities in the United States is presented for the purpose of clarifying the basic dilemmas of changing schools to prevent delinquency. Until the means of effectively implementing prevention programs in schools can be derived, the potential for school - based prevention will remain unrealized.

"Reformers have the idea that change can be achieved by brute sanity."

- George Bernard Shaw -

Prevention in the Schools

Schools as a Vehicle for Prevention

Community psychologists and other prevention specialists view schools as prime staging areas for mental health programs of all kinds (Clarizo, 1979; Jason & Ferone, 1980; Lemle, 1976; Medway, 1975; Powell, 1975; Pickover, Barbrack, & Glat, 1982; Schuiman, Ford, Busk, & Kaspar, 1973). Compulsory education provides a convenient and (virtually) captive audience for mental health efforts including early diagnosis and referral (Anthony, 1982; Cowen, 1982) services to individual children or their families, as well as social skills training, affective education, parenting education, crisis intervention, peer group development, training in problem solving skills, and sex and family life education. Numerous reports in the social science literature describe successful school-based prevention programs such as Rochester Primary Mental Health Project (Cowen, Trost, Lorion, Dorr, Izzo, & Isaacson, 1975; Cowen, 1982), the Woodlawn Mental Health Center Program (Kellam, Branch, Agrawal & Ensminger, 1975; Schiff & Kellam, 1967), and the Connecticut Behaviorally Oriented Multilevel Preventive Approach (Allen, Chinsky, Larcen, Lochman, & Sellinger, 1976). Advocates of school-based primary prevention programs concur that direct mental health services, as currently provided, represent only an inadequate stop-gap measure until effective prevention efforts can be implemented (Bower, 1972). Such consensus is unusual in social science. This consensus, combined with the availability of successful prevention programs, leaves one wondering why effective prevention projects are so rare.

Sarason (1971) provides an eloquent description of the organizational reasons why schools are not necessarily the ideal vehicles for primary prevention programs. He despairingly describes a variety of influences inherent in schools as organizations which make implementation of any fundamental change in school operation problematic at best. Unfortunately, the authors of the most successful school-based prevention projects rarely discuss how to overcome the obstacles delineated by Sarason. This paper focusses on the problems of implementing and sustaining a school-based primary prevention program to prevent juvenile delinquency in seven cities in the United States.¹ The need for prevention programs is generally acknowledged and the technology of effective programs has been developed; until the means of putting these technologies into action can be derived, school-based primary prevention will remain just an "idea whose time has come."

Organizational Change or Additional Services

Some prevention programs treat schools as locations for service delivery by "outsiders" i.e. consultants, volunteers, child aides, or child development specialists. Teachers and other school staff tend to be marginally involved in the prevention program; their contribution is often limited to the referral of children who need services and coordinating with the "outsiders." Even such limited attempts to integrate mental health

¹The Delinquency Prevention Research and Development Project is funded by Grant No. 79-JN-AX-0014, Supp. #1 and Grant No. 80-JS-AX-0052, Supp. #1 from the Office of Juvenile Justice and Delinquency Prevention of the Department of Justice, Principal Investigators Joseph G. Weis, J. David Hawkins, and Richard L. Janvier. The opinions expressed in this paper are those of the author and not necessarily those of the Center for Law and Justice or the Department of Justice.

services into the organizational culture of the school are complex and fraught with many obstacles, any one of which could prove fatal to the collaborative effort. Allen et al., (1976) defend this limited approach to intervening in the normal operation of schools as crucial to the adoption and implementation of any prevention program. They quote Fairweather's (1972) contention that "an intervention is acceptable to a society in direct proportion to the degree that the innovation does not require a change in the roles or social organization of that society" (p. 77). Allen et al. (1976) accept the premise that any attempt to change the teacher's role in the school will be unacceptable to the teacher and will be successfully resisted.

Other school-based prevention specialists, especially those concerned primarily with juvenile delinquency, view change in the normal operation of the school as central and crucial to the preventive intervention (Gottfredson, 1981; Hawkins & Weis, 1983; Johnson, Bird & Little, 1979; Polk & Schafer, 1972). These prevention specialists view certain regular processes common to public schools such as ability tracking, reactive behavior control, discipline policies, poor instructional methods, norms promoting competition, isolation of classroom teachers, poor staff development practices, and lack of instructional leadership as contributing causes of delinquency. Hirschi (1969) explicitly pointed at school experiences as one of the major causes of delinquency. Although this has not been empirically proven (see Gottfredson, 1981 and Empey, 1978 for reviews), this view has gained acceptance among criminologists (Weis & Hawkins, 1983) and policy makers (Johnson, Bird, & Little, 1979). If these attributes of public schooling are actually contributing causes of delinquency, then prevention programs which avoid challenging the basic operating procedures of the

schools which house their programs are doomed to have a marginal effect on the lives of the majority of children whose delinquency they hope to prevent.

This poses a dilemma for delinquency prevention. Changing some of the basic organizational norms and role definitions of schools is seen as crucial to preventing delinquency; however, the more these norms and role regularities are challenged, the less likely the prevention program is to be adopted, implemented, and institutionalized by the school personnel who are crucial to its success. Often school reformers have attempted to overcome this dilemma by "buying off the opposition" through bringing in extensive financial and material resources as a part of grant or other external funding. This solution has not often worked because even where opportunistic administrators have agreed to implement such a project, individual classroom teachers -- who rarely benefit appreciably from additional funding -- have been able to resist it in subtle or not so subtle ways. One form of resistance that has proven effective for teachers has been simply to offer no resistance and wait for all the consultants to go away, as they almost always do.

Persons with little experience in schools might think that teachers would adopt a program if it seemed to have promise for helping children. However, teachers are subjected to a continuous array of programs with promises of helping children and could not be expected to try all or even most of them. Teachers' past experiences of broken promises and misrepresented programs has caused many to be skeptical of all innovations or to assume that such innovations are promoted primarily for the self-aggrandizement of the developers. This has been too often true, and failed programs have contributed to "poisoning the well" for all future innovations. Zax and Specter (1974) stated the issue concisely:

The goal of establishing primary prevention programs in existing schools is difficult to achieve, but is worthwhile to pursue. The two challenges facing the interventionist are the need to demonstrate that his effort will have substantial positive effects, and the need to implement his approaches by gaining entry into an institutionalized setting where workers may fear or discount his efforts. Although several programs ... offer evidence of positive effect, none has been widely sought or accepted within the educational community. Successful future efforts may depend upon an increased sophistication in the technique of analyzing the social system of the school and of designing preventive interentions that fit the needs and tolerances of school personnel (p. 170).

The first step in carrying out Zax and Specter's challenge to analyze the social system of the school and design interventions that fit the needs and tolerances of school personnel is to review what is known about the needs, tolerances, and social systems of schools. The second step is to analyze the implementation of the school-based delinquency prevention program in terms of the basic issues of organizational change in schools.

Research on School Change and Program Implementation

Educational researchers specializing in organizational change have studied the problems of knowledge transfer, organizational development and program implementation intensively for at least the past fifteen years. A number of major national studies have attempted to identify the characteristics of innovations and educational settings which foster successful adoption, implementation and maintenance of educational reforms (Ahrends & Ahrends, 1977; Berman & McLaughlin, 1976; Crandall & Loucks, 1983; Fullan, 1982; Miles, Fullan & Taylor, 1980). This research effort has coincided with a parallel inquiry into the characteristics which distinguish effective schools from less effective ones (Brookover, 1981; Ednonds, 1979). While there is a diversity of opinions within each line of research, the overlap in findings is remarkable; to a large extent, effective schools have the same characteristics as schools which are capable of innovating successfully.

The following section will summarize the characteristics of effective and innovative schools and point out unresolved issues in these findings. These ongoing issues can be discussed in terms of three inter-related dilemmas:

- 1) The program and the process of change
- 2) Principal leadership and teacher involvement
- 3) Program integrity and adaptation

The Program and Process of Change

Practitioners and researchers have learned a great deal about the complexity and difficulty of trying to change the way schools operate -- mostly the hard way from grueling, expensive and painful failures. The literature on school reform has been described as "a wasteland of failed programs" (House, 1976). The most important of these hard-won lessons is that the objective merits of a proposed innovative program are less important to the ultimate outcome than the process of implementing the innovation. "The quality of an innovation (as deemed by experts) is not a predictor of its ultimate use" (Berman & McLaughlin, 1978: p. 161). Instead, the outcomes of a change effort depend critically on how the innovation is managed and implemented -- on the process of changing (Berman, 1981). Goodlad et al. (1970) found that there was no implementation of a district-sponsored innovation in 60% of the classrooms observed and high quality implementation in only 3%. Implementation problems have been identified repeatedly as the reasons for failures of educational innovations, regardless of their content (Gross, Giacquinta & Bernstein, 1971; Sarason, 1971; Smith & Keith, 1971). If a program is not implemented, obviously it can not be effective, regardless of its objective merits.

If the implementation process is crucial to the success of an innovation, what are the critical aspects of the process of change? Bennis's (1966) complaint about theories of change is still pertinent to a great extent: "They tend to identify and explain the dynamic interactions of a system without providing a clue pertaining to the identification of strategic leverages for alterations. They are theories suitable only for observers of social change, not theories for participants in, or practitioners of, social change. They are theories of change, not theories of changing" (p. 99). Indeed, the sagest and most experienced students of educational change eschew formulas and prescriptions for change. Fullan (1982) criticizes Zaltman, Florio & Sikorski's (1977) comprehensive formulation of steps for educational change as "a bloodless step-by-step set of recommendations," warning that change is never a wholly rational process. Fullan (1982) and Sarason (1971, 1982) prefer to struggle with the "murky areas of values and motivations" to guide the unpredictable course of change. "The answer is found not by seeking ready-made guidelines, but by struggling to understand and modify events and processes which are intrinsically complicated, difficult to pin down, and ever changing" (Fullan, 1982, p. 93). Fullan describes the process of educational change as coming to grips with the multiple realities of the people who are the main participants in implementing change. The people who will be depended on to make the innovation work must figure out what the change means to them and come to feel that the change is important enough to be worth the effort. The content of the innovation represents only one small part of what it means for classroom teachers to change how they teach.

Reasons to change. The next questions become where and how to start the process of change. Research, development, and dissemination

efforts have traditionally assumed that one starts with a problem, chooses the most appropriate solution, and evaluates the results in order to make the findings available to others with similar problems. This point of view has been widely criticized as an oversimplification, leading to counter-productive practices. School administrators have sometimes been viewed as problem-solvers who will adopt an innovation if (1) it has been proven effective, (2) is accessible to them, and (3) adequate resources are available for implementation. This rational, problem-solving model of change seriously misrepresents the typical situation.

The problem-solving model assumes that a problem can be identified and appropriate solutions selected. However, schools and school districts typically have a multitude of problems which may await action until, for instance, grant money becomes available for working on the problem. Mann (1976), a member of the Rand research team, states the case cynically:

Most school districts store their needs in a bottomless pit. When outside money appears, the district fishes around in the pit until it finds a need that matches the announced purposes of the money. That need is then elevated to the status of a priority in order to demonstrate the districts' commitment, and not incidentally in order to capture the bucks The process invalidates the central tenet of a district-based, goal-seeking model of change (p. 324).

Resourceful administrators use this money often to supplement underfunded aspects of their normal school operation, ironically using money for innovations to maintain the status quo. Berman and McLaughlin (1978), not surprisingly, report that opportunism in seeking innovation grants is associated with lack of implementation of the innovative program.

Opportunistic grant chasing is not the only reason for administrators to seek innovations. The incentives for principals, district administrators

and superintendents to adopt innovations include visibility and promotion. House (1974) describes the "educational entrepreneur" in terms of the ability to use innovations as stepping stones for promotion. Administrators become known among their peers and superiors for specific projects they have "done". "Doing" a project usually has more to do with getting the resources and containing the resulting criticism than in successfully implementing the innovation. Successful educational entrepreneurs tend to be promoted before the impact of their efforts can be assessed. Their replacements rarely have any incentive to struggle through the problems of implementing their predecessors' programs and the innovations are quietly dropped. In fact, it is in the best interests of an administrator to move up or out before the inevitable conflicts of significant change become associated with his or her name. This set of incentives for administrators has spawned the flood of innovations which are delegated to teachers to carry out. For the classroom teacher, the most adaptive response to the administrators' needs for the appearance of change is "Wait. This too shall pass."

The attempts of funding agencies to ensure that funding will result in implemented innovations can produce an alliance between administrators and teachers to minimize the influence of the outside funding agency. Schon (1971) provides a description of advanced strategies for resisting outside influence, which he calls "central":

- 1) Propose what central wants to hear, using their own jargon, but do what you think is best;
- 2) Play funding sources off against one another to get them to compete for your attention;

- 3) Seek minimum control by central over how money is actually spent by keeping budget items general;
- 4) Take advantage of the difficulty central has in finding out exactly what is going on;
- 5) Attempt to gain central's commitment over time, so that it develops such a heavy investment that it is difficult to back out;
- 6) If central fights back, bring pressure to bear on central's administrators by exploiting their political insecurities.

These are powerful strategies for avoiding real change, while maintaining the illusion of being innovative. Most disturbingly, these attributes of the incentive system for professional educators makes the cooptation of change efforts in the self-interests of everyone concerned, except perhaps the students and their families.

Principal Leadership and Teacher Involvement

The conclusion to be drawn from the preceding review of incentives for avoiding real change is that change can be successfully resisted by schools if the staff wants to resist; it is not necessary to conclude that planned innovation is impossible. However, it is only possible if school staff can be convinced not to resist it. This cannot be accomplished by simply demanding their cooperation; they must be involved in the decisions about implementation which affect them directly. Participation by classroom teachers in the earliest stages of considering an innovation helps build commitment to the goals of the program and to increase the teachers' responsiveness to problems as they arise (Paul, 1977). Failure to involve teachers simply invites resistance and implementation failure.

As every superintendent and principal intuitively knows, however, teacher participation in decision-making by no means ensures success, even for a high quality innovation. Fullan and Pomfret (1977) point out that the crucial questions regarding teacher participation in planning for innovation are "How much?" and "When?".

Berman (1981) suggests that participation is most important when the innovation is less structured but complex. When the innovation is simple and well-specified, a direct managerial approach with retraining of teachers is most appropriate. Rosenblum and Louis (1981) point out that when a strong superintendent sponsors a program innovation, teacher and principal participation is negatively associated with success. Their descriptions indicate that in the face of strong superintendent initiative, principals and teachers participation focuses on limiting the superintendent's power rather than contributing to the innovation. Optimal teacher participation in planning for innovations appears to depend on the explicitness of the innovation and the existing power relationships within the school district.

Although teacher participation in decision-making increases commitment to, and feeling of ownership for, the innovation, it can create problems of coordination and control which are crucial to the success of new programs (Paul, 1977). It has also been pointed out that "teacher participation" means some teachers and not others. The assumption that including teacher representatives on planning committees would increase acceptance of the innovation by all teachers has proven to be mistaken and naive (Fullan, 1982). House (1974) observes that some teachers rise in support and others in opposition to any credible educational change. According to his description of the natural history of an innovation, the strongest proponents advocate for the innovation and, in time, move other

settings to promote it. The resisting teachers remain and only vestiges of the initial innovation may survive in the original setting. These descriptions of teacher participation caution the change agent not to expect teachers to speak with one voice nor to expect the participation by teachers on planning committees to reduce the resistance of all teachers. Some teachers can be expected to resist any innovation and any change process.

Teachers' main concerns with innovative practices are practicality, relevance, and difficulty (Fullan, 1982). Each individual teacher must work out an acceptable answer to the question, "Why should I put my efforts into this particular change?" if they are to be expected to implement it. Hall, Loucks and their colleagues at the University of Texas have described a series of concerns typically exhibited by teachers faced with innovations. These progressive stages of concern range from lack of concern, personal concerns regarding time, demands, evaluation and rewards, to management, organization and efficiency issues to consequences for students and education in general (Loucks & Hall, 1979). These concerns can be alleviated or exacerbated, depending on how the innovation is introduced.

Teachers are skeptical of proposed innovations for some very good reasons. Teachers learn over time that innovations promoted by administrators and universities are often designed primarily to enhance the careers of the promoters, but if the innovations fail, teachers will be blamed. As House (1974) puts it, the personal costs to the teacher of trying an innovation are potentially high, and the benefits are unpredictable. Promoters of educational innovations regularly "oversell" their "products" in an attempt to convince administrators and teachers to try them. "Overselling" involves exaggerating the benefits to be derived and minimizing or

ignoring the difficulties, complications, or resources and time necessary for successful implementation. The difference between what teachers are currently doing and will be expected to do is usually left unclear, i.e., the extent to which the teacher is expected to change is unspecified. Typically, the innovation is "thoroughly explained" in one or two meetings which focus on general and long term goals, such as increases in reading scores or student self-esteem. If teachers are to be genuinely informed about an innovation, they need to know how the innovation will be implemented in the classroom, how this differs from their current practices, and how to manage and cope with students' immediate reactions to the change (Fullan, 1982; Montgomery & Leithwood, 1983).

Successful staff development programs and implementation support systems involve the teacher in application of the newly trained techniques to everyday classroom situations (Joyce & Showers, 1980; Stallings, 1980). This is perhaps the most crucial kind of involvement for teachers; however, the involvement of trainers and consultants with teachers in the classroom is probably the more novel aspect of staff development. Joyce and Showers (1980) studied effectiveness of inservice training in preparing teachers to use their training in their classrooms. They specified five aspects of training crucial to success:

- 1) Presentation or description of the skill or strategy being trained;
- 2) Modeling and demonstration of the skills or models of teaching;
- 3) Practice in simulated and classroom settings;
- 4) Structured or open-ended feedback about performance; and
- 5) "Coaching" for application including hands-on, in-classroom assistance with feedback.

Most staff development workshops stop at steps one or two. Few follow the teacher back to the classroom to help transfer the training from the workshop to the classroom. Joyce and Showers stress the importance of treating teachers as adult learners. Like younger learners, they must be taught, not just told, how to perform new skills. Stallings (1979) reviewed the staff development strategies of Follow Through projects and specified the distinguishing characteristics of successful efforts:

- 1) Training was continuous over time and developmental from easier to more difficult skills;
- 2) Training was integrated with a process of monitoring progress and providing feedback;
- 3) Training was designed to change the way teachers interact with each other and work together;
- 4) Training included demonstration, observation, and practice;
- 5) Training includes teaching participants to train others.

These schemes for successful staff development include monitored in-classroom practice and feedback on performance as a crucial provision. This creates a logistical problem to trainers and administrators; who will provide all this supervision and training follow-up in the classroom? Most schools barely manage a single yearly supervisory classroom visit for evaluation purposes. This problem creates opportunities for creative solutions.

Teachers learn most from other teachers. Schools where teachers talk to each other about teaching, work together to develop materials, observe each other teaching, and teach each other about the practice of teaching more successfully adapt to changing conditions (Little, 1981).

Huberman (1981) points out how drastically different this kind of teacher-teacher interaction is from the prevailing norms of privacy and isolation:

One of the most intriguing findings of our field study was that the introduction of a new practice or product obliged collaboration between teachers within a building, as well as between teachers and administrators, who had previously had virtually no substantive contacts. This was even the case for teachers at the same grade level working next door to one another and between whom relations were cordial, but in professional terms, frivolous (p. 217).

Consequently, a number of staff development specialists have advocated that collegial networks or peer coaching systems be used to provide the classroom follow-up for inservice training (Bird & Little, 1983; Lawrence & Branch, 1978). Peer coaching can be a cost effective alternative to expert clinical supervision (Goldhammer, Anderson, & Krajewski, 1980) when such expert consultation is too expensive or in short supply. The combination of effective staff development practices and peer coaching can provide the basis for development of common practices, shared terminology, and deferential relationships that Little (1981) terms "collegiality."

Although effective in-service training and coaching by experts or peers in the classroom have great potential for involving teachers in the nuts and bolts of applying an innovation in the classroom, they represent important innovations in themselves. Those who implement these kinds of inservice training or coaching systems will require models, time, and practice to implement these new strategies effectively. Although collegiality has been found to be related to the extent of teacher involvement in change, it is not necessarily related to the ultimate effectiveness of the practices (Rosenblum & Louis, 1978). "A healthy social climate insures breadth of implementation more than it ensures impact" (Sieber, 1981: 157). These findings may reflect the difficulty of implementing the

collegial practices themselves. That these innovations in training and supervision are difficult does not mean that they are less important. Sarason (1971) has observed that teachers are characteristically treated in exactly the same way they are criticized for treating students; they are simply told what to do. Like students, teachers must have the opportunity to act on their new learnings, discuss them, and experiment with them to discover their own meaning for the new behaviors.

Leadership and power sharing. If this kind of dynamic teacher involvement in program implementation is to succeed, it will require equally dramatic changes in the leadership of administrators. The kinds of teacher involvement in decision-making, resource allocation, and staff development described above represent a nightmare for an administrator whose primary concerns are containment of problems and avoidance of staff conflicts. However, there is also an unusual degree of consensus regarding the central and crucial role of the principal in innovation effectiveness (Crandall & Loucks, 1983; Fullan, 1982; Herriot & Gross, 1979; Rosenblum & Louis, 1978). Hall, Hord, & Griffin (1980) conclude, ". . . the degree of implementation of the innovation is different in different schools because of the actions and concerns of the principals" (p. 26). Crandall and Loucks (1983) reviewed successful innovations supported by the National Diffusion Network and concluded, "Forceful leadership is the factor that contributes most directly and surely to major, effective changes in classroom practice that become firmly incorporated into everyday routines" (p. 10). The stress on leadership and involvement of principals is on active participation and support for the innovation in meetings, training sessions, and in the classroom. The principal's investment of time and energy and willingness to take risks to make an

innovation work is the clearest sign to teachers that it might be worthwhile for them to do the same.

Gross (1978) outlines the general activities of a principal required to implement and sustain an innovation:

- 1) Provide a clear understanding of the proposed innovation;
- 2) Provide staff development skills training;
- 3) Provide adequate resources;
- 4) Provide for compatible organization arrangements such as supervision and support networks; and
- 5) Provide for the motivation of the participants.

This list refers largely to the kinds of involvement and development activities crucial to effective teacher participation described above. The principal's responsibility becomes orchestration of staff-development and teacher involvement in decision-making. This role is drastically different from the administrative norm of principal as house-keeper, public relations person, and crisis-manager who delegates authority over staff development and instructional matters. This role of the principal in selecting instructional practices, providing for systematic staff development and support, and taking active responsibility for instructional practice in the classroom has been termed "instructional leadership" (Cawelti, 1980; De Bevoise, 1984; Sergiovanni, 1984; Shoemaker & Fraser, 1981). Instructional leadership is included as one of the important characteristics of effective schools (Brookover, 1981).

When principals as instructional leaders are responsible for "providing for the motivation of the participants in the innovation," the principal's own motivation must be provided for as well. Much has been recognized about the difficulties of the principals' role as "the person in the middle" in

educational change (Fullan, 1982; Sarason, 1971). The principal is responsible for both stability and innovation at the same time. The tendency to become isolated under the burden of responsibility applies even more to principals than teachers. Principals have few opportunities to exchange ideas under constructive conditions and they appreciate opportunities to meet with other principals and discuss common problems and frustrations (Rosenblum and Jastrzab, 1981). Principals need the opportunity to interact professionally with program developers, other principals, and teachers in order to develop their own meaning for an innovation. Opportunities for professional development and interaction for principals in their role as "middlemen" in the change process are much needed and only recently are being established (Fullan, 1982; see Leithwood & Montgomery, 1981; Montgomery & Leithwood, 1983). If principals are to be capable of providing direction, motivation, and support to implement educational innovations, they need direction, motivation and support themselves for this innovative role.

Program integrity and adaptation

If teachers and administrators are to be genuinely involved in decision-making about implementation of innovations, how much can they change the innovative program to adapt it to their needs? Berman (1980) issues a stern warning to program evaluators who view educational innovation as a program that can be installed in different settings, rather than a complex process of change in each school and classroom:

Researchers should not expect a faithful replication of innovations. Variation, not replication, is to be expected Accepting educational change as an implementation-dominant process that intrinsically involves adaptation of the innovation to its setting implies a need to rethink many aspects of research as well as policy and practice In this situation, the attempt to obtain high fidelity to program design may create implementation problems, not overcome them (p. 264).

Fullan and Pomfret (1975) are similarly unequivocal about the attempt of researchers to maintain program integrity by inhibiting adaptations by the participants: "The very process of carrying out exhaustive research may interfere with the effectiveness of implementation" (p. 119). However, adaptation can cover a multitude of sins -- including cooptation of the program or its evisceration by eliminating the aspects of the innovation that require the most change. Popkewitz, Tabachnick, and Wehlage (1982) maintain that most reforms are transformed to variations on the status quo by the time they reach the classroom. They describe the gray area between program adaptation and cooptation:

And each school used the reform technologies in a way which responded to its unique social situation. Schools did not merely adapt the program, making modifications to reach the same goal; rather, they revised both the technology and its espoused goals. Such revisions helped to conserve quite different institutional conditions -- in each of the schools, a different style of work, conception of knowledge, and professional ideology was maintained ... (p. 4).

The more things change the more they remain the same.

The dilemma inherent in the debate about program integrity and adaptation involves the other issues of change, leadership, involvement and the personal development of meaning for the innovation. Apparently, teachers and administrators must be allowed to act on, experiment with, and decide about how the innovation will be enacted in order for it to become meaningful and important to them. But how far can this adaptation be allowed to go before the program loses its identity -- and perhaps its effectiveness?

Berman and McLaughlin (1976) found that local adaptation of program materials was crucial to successful teacher change. However, they studied federal initiatives which provided seed money designed to stimulate local development. Crandall and Loucks (1983) studied schools

which had successfully implemented fully developed programs, made available through the National Diffusion Network. Predictably, they reached a different conclusion, based on their experience with different types of innovation efforts. They view local adaptation and development of materials as "reinventing the wheel." They point out that having teachers spend time on materials development inhibits change in practice if it takes time away from attempting the changes in the classroom. However, teachers interacting with other teachers about materials can be beneficial, if early practice in classroom application occurs as well. It is not the materials adaptation per se that is helpful for teacher change, it is interaction with other users about the ideas and practices, with or without materials adaptation. Crandall and Loucks (1983) stress, however, that spending time practicing application of the innovation in the classroom is most crucially associated with successful teacher change.

Crandall and Loucks' (1983) conclusion regarding the issue of adaptation can be used to help make sense of the variety of issues raised regarding the process of change. Yes, all participants need the opportunity to discover the meaning of the innovation for them in their role in the school. Teachers talking with teachers about the problems of implementation will help. Principals talking with teachers about the practices and about allocation of resources for the innovation will help. Principals talking to other principals about the change in their role, about teacher participation in decisions, and about the innovative practices will help. All of this is important and takes time. But it cannot take so much time that it preempts the time necessary to enact the innovation, practice it, and master it. And, like students, participants in the implementation of an innovation need feedback on how well they are doing. This is a crucial role

that can be provided by program developers, evaluators, and "linking agents." Those who understand the program and have seen it in its many manifestations in different schools cannot abdicate their responsibility to the program by allowing the participants to adapt it out of existence.

There is general agreement in the research literature regarding the crucial role in educational innovation played the "linking agent," "change agent," or "research utilization specialist" (Crandall and Loucks, 1983; Fullan, 1982; Louis, 1981). The linking agent is responsible for helping the users of educational innovations to cope with the change process, develop problem solving capacities, draw on appropriate resources, and provide feedback on progress. The linking agent is the "human face" of the innovation and provides the participants with an ongoing interpersonal relationship as a representative of the program of innovation. Havelock (1969) described the varied roles linking agents play in the knowledge utilization process: conveyor of information, trainer in new skills, consultant for resources, facilitator of group processes, leader and motivator, defender of the innovation, and public relations person for the change program. The role of the linking agent is at the center of the dilemma of program integrity and the adaptation inherent in the change process.

Fullan (1982) cautions against a strong view of the linking agent as a promoter and defender of the innovation:

The more the change agents are committed to a particular change, the less effective they will be in getting others to implement it if their commitment represents an unyielding or impatient stance in the face of ineluctable problems of implementation. Commitment to a particular program makes it less likely they will set up the necessary time-consuming procedures for implementation, less likely they will be open to the transformation of their cherished program and tolerant of the delays which will inevitably occur when other people begin to work with it. If we react to delays and transformations by assuming that they arise from the incompetence or bullheadedness of those implementing the program, we will add one more major barrier to the considerable number already operating (p. 85-6).

This wise warning does not resolve the dilemma of program integrity and adaptation, but it provides guidance to change agents to keep the goals of the innovation in mind and allow that there may be many different ways to achieve these goals. Attempting to impose the linking agent's favorite strategies is not likely to be the way to achieve these goals.

The Process of Change in Action:

The Delinquency Prevention Research and Development Project

The following section provides a brief outline of the history and program of the Delinquency Prevention Research and Development Project. (For a complete program description, see Weis, Janvier, & Hawkins, 1980). The dilemmas of the previous section are discussed in terms of the actual problems faced in managing this prevention program in seven school districts. The effects of innovation management strategies on implementation are discussed and some sobering conclusions are suggested.

Background

In November 1979, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) of the U.S. Department of Justice initiated a research and development project to test the impact of an ambitious set of school-based innovations on delinquent behavior in the general population (not selected for risk) of youth. The program was based on the OJJDP's technical assistance experience with delinquency prevention and the program development efforts of its research arm, the National Institute of Juvenile Justice and Delinquency Prevention (NIJJDP). Experienced technical assistance providers, the Westinghouse National Issues Center and the Center for Action Research, as well as a prominent research and evaluation group, the National Center for the Assessment of Delinquent Behavior and its Prevention, were recruited to organize the R&D.

From the outset, the R & D required the close collaboration of two federal agencies and three independent research and consulting groups spread across the country from Washington, D.C. to Seattle, Washington. These organizations would be called upon to collaborate with schools and educational organizations applying for grants advertised through the Federal Register.

The goals of the Delinquency Prevention R & D centered on research: 1) assess the impact of the delinquency prevention programs on the delinquent behavior of students and 2) advance knowledge about the management of school-based delinquency prevention. The announcement in the Federal Register clearly stated the priority of research over service provision in order to discourage opportunistic applicants.

Theory and Rationale

The Social Development Model (Hawkins & Weis, 1983; Weis & Hawkins, 1979) provided the rationale for the R & D program. It represents a blend of social control theory (Hirschi, 1969) and social learning theory (Bandura, 1971; Akers, 1977). The particular contribution of the Social Development Model is that it has clear implications for prevention programming. It focuses on promoting student involvement in learning by creating environments in the home, school, and community which provide increased opportunities, skills, and rewards for involvement. The prevention program for schools designed to increase opportunities, skills, and rewards for students is embodied in the six program elements of the Delinquency Prevention R & D (Weis & Hawkins, 1979).

The Program Elements

The six program elements represent inter-related program goals and activities, all designed to increase opportunities, skills, and rewards. Each

is based on adaptations of previous program efforts in education, special education, and corrections which have been shown to have particular promise for delinquency prevention (Wall, Hawkins, Lishner, & Fraser, 1979). One program element focused on innovative classroom instruction techniques such as interactive teaching, cooperative learning and proactive classroom management. Others described means of providing for social skills training and student involvement projects, increased parent-teacher communication, and parent and student participation in school decision-making. Infusion of vocational and career information in the curriculum of all academic subjects, combined with experiential education outside the school building, were aspects of another element. One program element focused exclusively on the process of innovation in schools and the role changes required of teachers and administrators in order to implement the other program elements.

The Management of Change

The scheme for successfully implementing this ambitious set of program elements included strategies based on knowledge of the process of change in schools. Most importantly, the program elements were described in terms of critical characteristics and goals with built-in latitude for adaptation by each school. The project was designed to provide planning time, starting in the autumn of the school year prior to first implementation. Shared decision-making for school administrators, teachers, and community members was strongly promoted. Teachers were to be trained using sophisticated staff development techniques including modeling of new techniques, practice and in-classroom follow-up. Principals were trained in the change process and collaborative decision-making. Networks of teachers were arranged to promote interaction and mutual support. Peer

supervisors were trained in observation and feedback techniques. Each program site was assigned two linking agents --one from technical assistance and one from research -- to provide resources, group facilitation, trouble-shooting, program monitoring, and public relations functions.

Scope of Change

The changes required by the Delinquency Prevention R & D of the host schools were enormous. Some of the more important changes were the following:

- 1) Creation of planning teams of administrators, teachers, students, and parents to collaborate to make decisions about project implementation;
- 2) Random assignment of students and teachers to experimental and control conditions within the same school building;
- 3) Extensive observation of all experimental and control teachers by administrators, other teachers, and researchers;
- 4) Large amounts of time from all participants in planning, training, and executing the program;
- 5) Significant alteration of classroom instructional practice and management tactics requiring extensive role changes for teachers; and
- 6) Extensive surveying of attitudes, administration of criterion-referenced tests, and monitoring of program implementation.

This ambitious list of innovations was intended to be implemented without hiring additional personnel, in order to increase the chances that the program would be institutionalized after the federal money stopped. The relatively generous grants to each site were to be spent for trainers, released time for teachers, consultants, materials, planning retreats, and,

in some cases, compensation for teachers for training and planning time. Some part-time personnel were hired to establish different aspects of the program, but their contribution was explicitly to be temporary.

The Process of Change

Seven grants were awarded after an extensive two-stage application process and site visits to each applicant. Four of the grantees were school districts, two were educational consulting agencies, and one was a middle school. Most had had some association with OJJDP in the past and both of the consulting agencies had experience managing large grants.

One of the consulting agencies and three of the school districts experienced considerable difficulty recruiting schools to participate. One school district dropped out of the project during the planning year after three schools in the district decided not to participate. One of these rejected the project after close examination of the program; the faculty of this school played an equal role in decision-making about the project and decided not to participate because "too many decisions were made at the federal level." They rejected the project in spite of a drop-out rate of over 50% between ninth and twelfth grades.

In another school district, every school approached had a principal who was just arriving or intending to leave within a year. None of these principals was willing to tackle a demanding set of innovations. One new middle school principal agreed only after exacting promises of considerable district support. One of the principals approached by a consulting agency grantee used the planning year to get different potential funding sources to bid for the school's participation. The principal of this school managed to get a "better offer" -- promises of resources without having to comply with restrictive research requirements.

Their grant applications notwithstanding, none of the grantees was primarily interested in the project as a delinquency prevention program per se. They viewed it as an educational innovation program with high quality consultants and resources for educational changes important to their districts. Designation of the project as a delinquency prevention program caused public relations problems for some administrators who requested the name be changed to the "School Enhancement Project." They felt that initiating a delinquency prevention program would imply to the public that delinquency was a problem in their schools - a public relations faux pas.

The two educational consulting agencies maintained staff grant writers and applied for grants largely to continue established working relationships with schools in their area and to support their operating costs. With both of these agencies, over half of the grant monies for the prevention program were expended on the consulting agencies' own staff and overhead, causing considerable friction with school personnel who felt they bore the burden of the work with minimal compensation. Both consulting agencies experienced serious financial problems during the course of the grant and absorbed increasing portions of the grant each year.

These aspects of the concerns and priorities of the grantees are not mentioned in order to disparage their good faith efforts to provide for the education of the students in their school districts. However, it is important to point out that, from grantees' points of view, they were "managing change" by restricting the disruptiveness of a demanding program and supplementing their ability to provide what they considered to be vital services. Providing a planning year was an important part of the management of change from the point of view of the federal agencies and

their consultants. From the point of view of the prospective participants, they were managing change by deciding how much they would conform to research demands and how money would be spent, or by using the planning process as a bargaining chip in negotiations with other potential resources in the district or in the state. Each participant in this process attempted to shape the emerging project to its own purposes. OJJDP's purpose of research and development in delinquency prevention was just one purpose among many. Most of the more salient motivations had nothing to do with delinquency prevention.

Program Integrity and Adaptation

Crucial developments at the granting agency, technical assistance and research, intermediary grantee, school district, principal and teacher levels of the project had important effects on implementation of the prevention program. Federal funding was a persistent and critical problem from the beginning. Initially, the project was to include a planning year, three implementation years and a year of follow-up. By the end of the planning year, plans had changed and only two more years were to be funded due to cut-backs at OJJDP. After a change in administrations, the existence of OJJDP was in question by the beginning of the first implementation year. After the first year, the continuation funding for the second year was in jeopardy and the grantees prepared to end the project, but the funds were finally secured after the second school year had already begun. Funds for technical assistance were denied during the second year. The research budget was halved during the second year. This chronic instability undermined the participants' confidence in the funding agency and its consultants, with the result that they were reluctant to take any risks to implement the project and felt little obligation to honor their agreements.

Although the program elements were designed to be adapted to local needs, the research design was not. Objectionable aspects of the research such as random assignment of teachers and students and systematic classroom observation were non-negotiable. In some cases these aspects of the R & D were deciding factors for schools not to participate or to strenuously resist the federal consultants. In one case the teacher's union refused to permit its members to be observed and threatened to take the district to court. In another case, a parents' objections to confidential student survey questions about delinquent behavior nearly ended the project in one school.

Principal Leadership and Teacher Involvement

Principal and teacher turnover presented a serious impediment to implementation. Of the seven original principals agreeing to implement the R & D, only four were still principals of those schools two years later. In one school, the principal was transferred and half of the experimental group teachers were "excessed" on the day project training was to begin. Two other principals left after the first implementation year. For the most part, the training, cooperative agreements, and accumulated goodwill left with the original principals. Their successors either paid lip-service to supporting the project in order to avoid losing the grant or were openly hostile. None of these successors attended any of the ongoing project training sessions.

Although in each case the faculty of each school had voted to "adopt" the project and were aware of the requirement for random assignment of teachers, a minority of the selected teachers passively refused to participate. They were absent for many of the training sessions, failed to complete implementation checklists, showed films during scheduled observations in their classrooms, and failed to show up for feedback sessions.

Pressure from principals usually resulted in threats of grievances to teachers' unions.

Impact on Implementation

Preliminary evidence from experimental group students' answers to questions about the program indicate that they perceived the basic implementation activities (e.g., I learn about jobs in the community as a part of my schoolwork; In my classes we learn to work together in groups) but not necessarily the intended benefits of the implementation activities (My teachers are fair; What we learn in school will help me when I get out; Other students want me to do my best work; I often feel discouraged in school.) There is even some evidence that students who were exposed to teachers in the second year of the project who implemented less than those they had had in the first year felt deprived of their previous opportunities and rewards.

On the whole, the extent and quality of implementation was variable within schools and across schools. By the end of the second implementation year, the experimental group teachers in three of the seven schools were implementing the classroom practices to a significantly greater extent than the control teachers in the same school. There were non-significant differences in three schools where there was great variation within the experimental faculties and a number of the control teachers were using similar techniques. Implementation could not be assessed in one school because the teachers refused to be observed by researchers.

After two years of implementation, considerable changes had occurred in every project school. For the most part, these changes were in the direction of the program goals and had gained the support of the majority of the participating faculties. Each school district had made extensive plans to introduce the program to other schools and in some

cases had allocated significant resources for training and materials dissemination. However, the reality of the program in the schools fell far short of the original vision of changing the social-developmental environment of schools in order to prevent delinquency. In some schools, disciplinary referrals were reduced for experimental students. However, given the variability of implementation, high staff and student turnover rates, and the incompleteness of police records, the program is unlikely to be able to prove that it has prevented delinquency.

Reassessing the Issues of School Change

School change is an implementation-dominant process! The prevention program as it was originally conceived provided only general guidelines and directions for change. To say that the basic tenets and crucial characteristics of the program were "approximated" is to underestimate the compromises, variations, and non-happenings that characterized real-world implementation. Constant turnover in staff made the change process one in which it was necessary to always be starting over from the beginning. The change process depends to a great extent on the personal relationships that develop between the participants and support them to experiment and take risks. When key personnel are replaced, the new person must be socialized to the new expectations and relationships. This takes time and effort and the new person has not experienced the history of the project that contributes to making it worthwhile to expend this time and effort. Until new norms can be established for the school capable of socializing new members, each time a participant in the change process is replaced, a part of the change process is lost.

The turnover in staff also influenced the issue of teacher participation and principal leadership. Teachers who participate in decision-making

do develop ownership for the effort over time and help to lessen the resistance of other teachers who are less involved. However, only a minority of teachers are willingly involved and those tend to be the teachers who have accepted additional responsibility for various aspects of the school's functioning. These same teachers are also most likely to be promoted or transferred to other positions with more responsibility and compensation. Some of these teachers continue to use and promote project practices in their new positions, but their loss depletes the "critical mass" needed to structurally change the organizational culture of the original project school.

Loss of a principal who has been trained and is a proponent of the change program is virtually fatal for the innovation. Lack of active support from a principal makes the risks and awkwardness of changing teaching practices become virtually untenable for all but the true believers. In one case, experimental teachers aggressively pursued the prevention program as a means of confronting a new unsupportive principal. They dramatically improved implementation during this time, however, all but one transferred to other schools the following year at the principal's instigation. Unfortunately, schools in districts with the greatest delinquency problems also seemed to have the highest rates of staff turnover.

Adaptation of the program presented a minimal problem for the R & D because each element of the program had been designed to be adapted to some extent. The basic problem was adequate time, practice, and feedback to master the new skills. Most teachers' performance improved over time as they felt more confident of their skills and the students' reactions. Instead of adapting practices, teachers just refused to implement aspects of the the project that they did not like or expected to be

difficult. In one aspect of the instructional innovation, Student Team Learning, many teachers failed to implement one time-consuming aspect of the technique (scoring for improvement points) that was crucial to its effectiveness. The term "adaptation" misrepresents this "pick and choose" aspect of variation on the program.

The linking agents provided a crucial function of maintaining a vision of what the project could be. Constant reminders that the purpose of all the program activities was to increase opportunities, skills, and rewards for students helped to guide the resolutions of some disputes. Research requirements which were treated as non-negotiable represented constant sources of resentment to many of the participants, however.

Conclusions

The Social-Developmental Lessons of Schooling

The Delinquency Prevention R & D attempted to change the social conditions of seven schools in order to give the students extra opportunities to develop and use their skills and obtain social rewards for becoming involved. Skillfully involved students were hypothesized to have more reason to avoid delinquency because they have more to lose. In order to do this, teachers had to be provided with additional skills, opportunities to use them, and rewards for trying and taking risks. And it was the same for principals. The parallels between the social conditions that support change for students, teachers, and principals were strikingly obvious.

The status quo was just as obvious. Few students cared about their work and only a few cared about grades. They spoke to each other about everything but schoolwork and spent as little time learning their assignments as possible. They developed elaborate and creative social interchanges to try to make school life satisfying and to create opportunities for reward and pride that were not based on academic success. Many of their most inventive means of creating opportunities, skills, and rewards were counterproductive to the espoused goals of schooling (Cusick, 1973).

The symptoms of burnout evident in many of the teachers looked eerily similar to the attitudes of the students. In response to their demanding and unrewarding work experience, they became motivated largely by personal concerns and lost interest in professional development. Preoccupation with their own welfare was accompanied by a progressive

lack of concern for the students' welfare and a tendency to blame problems on the students or the "system". A pointed lack of creative involvement in school functioning was based on a pervasive attitude that it was not worth the effort (Truch, 1980).

Principals characteristically "ditched" as many training sessions as possible. They were more concerned with keeping teachers and parents off their backs than seeing how the training was being applied in the classroom. As soon as they were freed from task restraints, the conversation turned to sports, recalcitrant teachers, or incompetent assistant superintendents.

When the program developers were faced with intractable problems of implementation, they resorted to questioning the competence of their clients and impugning each other. Failure of the grantees to do as they were told resulted in threats to terminate funding.

Clearly participants in every aspect of the project could have benefitted from additional practice in applying the very same social and problem-solving skills that they were attempting to teach to the students. More importantly, they could have benefitted from changes in the demanding and frustrating conditions of their workplaces. "No one contends that schools do a good job of addressing personal or social-developmental goals" (Fullan, 1982: 11). That is just as true for teachers and principals as for students. Sarason (1971) asks, "If teaching becomes neither terribly interesting nor exciting to many teachers, can one expect them to make learning interesting or exciting to students?" (p.166-7).

In order to pervasively change social-developmental conditions for students, extensive organizational changes in schools are necessary. Volunteer aides and mental health referral systems in schools provide an

invaluable service for those students who are least able to cope with the frustrating experience of schooling. The benefits of these special services must be weighed against the effects of a few burned out teachers and the conditions that produced them. Fullan (1982) points to the failure to attempt changes in schools to promote positive social development:

We cannot leave this topic without acknowledging what consequences, wittingly or not, schools now have on personal and social development . . . schools reward conformity, subordination to authority, discipline, intellectually as opposed to socially and emotionally oriented behavior, and hard work independent from intrinsic task motivation. The authoritarian, undemocratic structure of the school replicates the hierarchical order of the work place. Not only does the school overtly neglect personal and social-developmental goals, it covertly shapes development in certain directions. (p. 289).

Schooling shapes its participants covertly, although unintentionally, towards frustration, apathy, and self-concern. School-based mental health programs can only try to pick up the pieces for the most affected and least adaptive victims, unless the conditions causing these problems can be successfully changed.

Is School Change for Prevention Possible?

The most successful prevention projects in mental health such as the Rochester Primary Mental Health Project did not depend on pervasive organizational change in schools. As Allen et al. (1974) explicitly advocated, they did not try. This may be the safer and surer, although more limited, option.

The majority of attempts to implement planned educational innovations requiring genuine organizational change appear to have been failures, but there have been some successes (Crandall and Loucks, 1983; Fullan, 1982). These failures and successes have yielded some valuable lessons in how to approach and conduct change in schools that can be applied to prevention programs in mental health:

- 1) The multiple realities of the key participants must be taken into consideration to understand the process of change. An innovation to be implemented is apt to be a stepping stone for promotion for a principal and part of an ongoing power struggle between district administrators. Any innovation is only a limited event in a larger setting with an ongoing history of political and social change. A school district is an ongoing system that selects and uses an innovation for its purposes (Berman, 1981).
- 2) The merits of a program will not be enough to make it successful if the managers expect that others will easily accept it or can be forced to accept it. Change is a process, not an event, a decision, or a policy.
- 3) Program variation and adaptation are the rule. Fidelity to program design is not to be expected and attempts to enforce program fidelity on the people implementing the change may be counterproductive.
- 4) Implementation is a process of progressive clarification. Skillful use of new practices can be achieved over time with practice and feedback in a supportive work environment. This is equally true for students, teachers, administrators, and innovators.
- 5) Change requires both pressure and respect. Systematic change over time is most productively seen as resocialization following the principles of adult learning. Both strong leadership and participatory decision-making contribute to successful change.

- 6) Change takes time and effort. Innovation is not something that can be accomplished on free time, added as an afterthought, or explained in a single meeting. Innovations are learned in practice with feedback. Effective change in the classroom is a step-by-step process proceeding from one minimal, concrete goal to another. The more extensive the change sought, the longer it is apt to take. Fullan (1982) indicates that any significant innovation in schools will take at least two or three years to implement.
- 7) One can only expect to change the behavior of some of the people in the school, not all or even most. Some teachers and principals will resist any change with which they are confronted.
- 8) No amount of knowledge will make it clear what action should be taken. Action is based on knowledge of the process of change, political considerations, limited resources, and intuitive snap decisions. The multiple realities of all those affected influence the consequences of any action.
- 9) Implementation will be compromised by any and all of the complex influences described above. Implementation -- change in practice -- is "the bottom line" in educational innovation.
- 10) Assume that change is a frustrating and discouraging business. Conflict and disagreement are not only inevitable, but fundamental to successful change (Fullan, 1982).

Ferrar, DeSanctis, and Cohen (1980) likened federal grants for educational innovation to a "lawn party" where guests (implementors) sampled from the dishes, selected their associates, and did pretty much as

they pleased. This captures the "pick and choose" character of implementation experienced in the Delinquency Prevention R & D, but not the sense of precarious balance necessary to keep the project from crumbling. For this aspect of school change, a "house of cards" is the more apt analogy. Berman (1981) reflects this attitude:

Successful processes do not seem robust, but rather consist of fragile concatenations of events, people, and ideas at the right times in the right places. A single missing, misplaced, or mistimed element seems likely to collapse the delicate "assembly" leading to success. Consequently, there are many ways to fail and few ways to succeed. (p. 270).

One must also consider the price of not trying.

REFERENCES

- Ahrends, R. I., & Ahrends, J. H. Systems change strategies in educational settings. New York: Human Sciences Press, 1977.
- Allen, G.J., Chinsky, J.M., Lochman, J.E., & Sellinger, H.V. Community psychology in the schools: A behaviorally oriented multilevel preventive approach. Hillsdale, N.J.: Lawrence Erlbaum Associates, Pub., 1976.
- Anthony, E. J., Primary prevention with school children. In H.H. Barton & L. Bellak, (Eds.) Community mental health II. New York: Grune and Stratton, 1982.
- Bandura, A. Social learning theory. Morristown, N.J.: General Learning Press, 1971.
- Bennis, W. Changing organizations. Toronto: McGraw-Hill, 1966.
- Berman, P. Toward an implementation paradigm. In R. Lehming & M. Kane (Eds.), Improving Schools. Beverly Hills, CA.: Sage, 1981.
- Berman, P. & McLaughlin, M. Implementation of educational innovation. Educational Forum, 1976, 47 (3), 345-70.
- Berman, P. & McLaughlin, M. Designing implementation to match policy situations: A contingency analysis of programmed and adaptive implementation. Santa Monica, CA.: Rand Corp., 1978.
- Bird, T. & Little, J.W. Finding and Founding peer coaching. Boulder, CO.: The Center for Action Research, Inc., 1983.
- Bower, E. M. Education as a humanizing process and its relationship to other humanizing processes. In S.E. Golann & C. Eisdorfer (Eds.) Handbook of community mental health. New York: Appleton, 1972.
- Brookover, W. Effective secondary schools. Philadelphia: Research for Better Schools, 1981.
- Cawelti, G. Effective instructional leadership produces greater learning. THRUST: Association of California School Administrators, 1980, 9 (3), 8-9.
- Clarizo, A. F. Primary prevention of behavioral disorders in the schools. School Psychology Review, 1979, 8 (4), 434-445.
- Cowen, E.L. The wooing of primary prevention. American Journal of Community Psychology, 1980, 8, 258-284.
- Cowen, E.L., Primary Prevention: Children and the schools. Journal of Children in Contemporary Society, 1982, 14(2-3), 57-68.

- Cowen, E.L., Trost, M.A., Lorion, R.P., Dorr, D., Izzo, L.D., & Isaacson, R.V. New Ways in school mental health: Early detection and prevention of school maladaptation. New York: Human Sciences Press, Inc., 1975.
- Crandall, D. P. & Loucks, S. F. A roadmap for school improvement: Volume X. Andover, MA.: The Network, Inc., 1983.
- Cusick, P. Inside High School. Toronto: Holt, Rinehart and Winston, 1973.
- Deal, T. & Nutt, S. Promoting, guiding - and surviving - change in small school districts. Cambridge, MA.: ABT Associates, 1979.
- De Bevoise, W. Synthesis of research on the principal as instructional leader: Educational Leadership, 1984, 41 (5), 14-21.
- Edmonds, R. Effective schools for the urban poor. Educational Leadership, 1979, 36, 15-27.
- Empey, L.T. American delinquency: Its meaning and construction. Homewood, Ill.: Dorsey, 1978.
- Fairweather, G.W. Social change: The challenge to survival. Morristown, N.J.: General Learning Press, 1972.
- Farrar, E., DeSanctis, J. & Cohen, D. Views from below: Implementation research in education. Cambridge, Mass.: Human Insitiute, 1979.
- Fullan, M. The meaning of educational change. New York: Teachers College Press, 1982.
- Fullan, M., Miles, M., & Taylor, G. Organizational development in schools: the state of the art. Washington: National Institute of Education, 1981.
- Fullan, M. & Pomfret, A. Research on curriculum and instruction implementation. Review of Educational Research, 1977, 47 (1), 335-97.
- Goldhammer, R., Anderson, R.H., & Krajewski, R.J. Clinical supervision: Special methods for the supervision of teachers (Second edition). New York: Holt, Rinehart, & Winston, 1980.
- Goodlad, J. I., Klein, M. F. & associates. Behind the classroom door. Worthington, OH.: Charles A. Jones, 1970.
- Gottfredson, G.D., School and delinquency. In S.E. Martin, L.B. Sechrest, & R. Redner (Eds.), New directions in the rehabilitation of criminal offenders. Washington, D.C.: National Academy Press, 1981.
- Gross, N., Giacquinta, J., & Bernstein, M. Implementing organizational innovations: A Sociological analysis of planned educational change. New York: Basic Books, 1971.

- Hall, G., Hord, S., & Griffin, T. Implementation at the school building level: The development and analysis of nine mini-case studies. Paper presented at American Educational Research Association annual meeting, 1980.
- Hawkins, J.D., & Weis, J.G., The social development model: An integrated approach to delinquency prevention. Seattle, WA: Center for Law and Justice, 1983.
- Herriot, R., & Gross, N. (Eds.) The dynamics of planned educational change: An analysis of the rural experimental schools program. Berkeley, CA.: McCutchan, 1979.
- Hirschi, T. Causes of delinquency. Berkeley, Calif.: University of California, 1969.
- House, E. R. Transferability and equity in innovation policy. Urbana-Champaign: Center for Instructional Research and Curriculum Evaluation, University of Illinois, 1976.
- House, E. The politics of educational innovation. Berkeley, CA.: McCutchan, 1974.
- Huberman, M. Exemplary center for reading instruction (ECRI) Masepa, North Plains: A case study. Andover, MA.: The Network, 1981.
- Jason, L. A. & Ferone, L. Promoting good mental health from primary to early secondary grades: Preventive interventions in schools. The Creative Child and Adult Quarterly, 1980, 5 (1), 43-54.
- Johnson, G., Bird, T. & Little, J.W. Delinquency prevention: Theories and strategies. Boulder, CO.: Center for Action Research, Inc., 1979.
- Joyce, B. & Showers, B. Improving inservice training: The messages of research. Educational Leadership, 1980, 37(5), 379-85.
- Kellam, S.G., Branch, J.D., Agrawal, K.C. & Ensminger, M.E., Mental health and going to school: The Woodlawn program of assessment, early intervention, and evaluation. Chicago: The University of Chicago Press, 1975.
- Lawrence, G. & Branch, J. Peer support system as the heart of inservice education. Theory into Practice, 1978, 17, 3, 246-247.
- Lehming, R., & Kane, M. (Eds.) Improving schools. Beverly Hills, CA.: Sage, 1981.
- Leithwood, K. A. & Montgomery, D. J. A framework for planned educational change: Application to the assessment of program implementation. Educational Evaluation and Policy Analysis, 1982, 4 (2), 157-67.
- Lemle, R. Primary prevention of psychological disorders in elementary and intermediate schools. Journal of Clinical Child Psychology, 1976, 5 (2), 26-32.

- Little, S. W. Norms of collegiality and experimentation: Workplace conditions of school success. American Educational Research Journal, 1982, 19 (3), 325-340.
- Loucks, S. & Hall, G. Implementing innovations in schools: A concerns-based approach. Paper presented at the American Educational Research Association Annual meeting, 1980.
- Louis, K. External agents and knowledge utilization: Dimensions for analysis and action. In R. Lehming & M. Kane (Eds.) Improving schools. Beverly Hills, CA.: Sage, 1981.
- Mann, D. The politics of training teachers in schools. Teachers College Record, 1976, 77 (3), 323-338.
- Medway, F. J. A social psychological approach to internally based change in schools. Journal of School Psychology, 1975, 13 (1), 19-27.
- Montgomery, D. J. & Leithwood, K. A. Evaluating curriculum implementation: A critical task for the effective principal. Paper presented at the American Educational Research Association Annual Meeting, 1983.
- Paul, D. A. Change processes in the elementary, secondary, and post-secondary levels of education. In N. Nash & J. Culbertson (Eds.) Linking processes in educational improvement. Columbus, OH.: University Council for Educational Administration, 1977.
- Pickover, B., Barbrack, C. & Glat, M. Preventive and educative programs within the high school. School Psychology Review, 1982, 2, 4, 399-408.
- Polk, K. & Schafer, W.E., Schools and delinquency. Englewood Cliffs, N.J.: Prentice Hall, 1972.
- Powell, W. C. Educational intervention as a preventive measure. Criminal Justice and Behavior, 1975, 2 (4), 397-407.
- Rosenblum, S. & Louis, K. S. Stability and change: Innovation in an educational context. New York: Plenum, 1981.
- Rosenblum, S. & Louis, K. S. A measure of change: The process and outcome of planned change in ten rural districts. Cambridge, MA.: Abt Associates, 1978.
- Rutter, M., Maughm, B., Mortimer, P., Ouston, J., & Smith, A. Fifteen thousand hours: Secondary schools and their effects on children. Cambridge, MA.: Harvard University Press, 1979.
- Sarason, S. The culture of the school and the problem of change. Boston: Allyn and Bacon, 1971. Second edition, 1982.
- Schon, D. Beyond the stable state. New York: Norton, 1971.
- Schulman, J. L., Ford, R. C., Busk, P. L., & Kaspar, J. C. Mental health in the schools. Elementary School Journal, 1973, 74 (1), 48-46.

- Sergiovanni, T.J. Leadership and excellence in schooling. Educational Leadership, 1984, 41 (5), 4-14.
- Shoemaker, J. L. & Fraser, H. What principals can do: Some implications from studies of effective schooling. Phi Delta Kappan, 1981, 63, 178-82.
- Sieber, S. Knowledge utilization in public education: Incentives and disincentives. In R. Lehming & M. Kane (Eds.) Improving Schools. Beverly Hills, CA.: Sage, 1981.
- Smith, L. M. & Keith, P. M. Anatomy of educational innovation: An organizational analysis of an elementary school. New York: Wiley, 1971.
- Stallings, J. Follow Through: A model for in-service teacher training. Curriculum Inquiry, 1979, 9(2), 163-81.
- Wall, J., Hawkins, J. D., Lishner, D. M., & Fraser, M. Juvenile delinquency prevention: A compendium of thirty-six program models. Seattle, WA.: Center for Law and Justice, 1979.
- Weis, J.G., & Hawkins, J.D. Background paper for the delinquency prevention research and development program. Seattle, WA.: Center for Law and Justice, 1979.
- Weis, J.G., Janvier, R.L., & Hawkins, J.D. Project overview: Delinquency prevention research and development project of the Office of Juvenile Delinquency Prevention. Seattle, WA: Center for Law and Justice, 1980.
- Zaltman, G., Floria, D. & Sikorski, L. Dynamic educational change. New York: Macmillan, 1977.
- Zax, M., & Cowen, E. L. Abnormal psychology: Changing conceptions. New York: Holt, Rinehart & Winston, 1972.